



**THE DATASHEET OF  
LE88010BQCT**



# VE880 Series

## Single Channel VoicePort™ SLAC™ Device

**Le88010**

### APPLICATIONS

- Voice Enabled DSL Modems
- Voice over IP/ATM
- Integrated Access Devices (IAD)
- Smart Residential Gateways (SRG) and Routers
- Set-Top Box with PSTN Line Interface
- PBX trunk interface
- FXO interfaces

### FEATURES

- **In combination with a DAA, provides a complete phone line termination-to-digital interface solution**
  - Fully programmable SLAC™ device
  - Disconnect, Ringing signal, Line-in-use and Line polarity detection,
  - Line supervision for parallel devices connecting to subscriber line
  - Small footprint package - 44-pin QFN
  - Minimal external discrete components required
- **Compatible with solid state or transformer DAA interfaces**
- **High speed, pin selectable PCM/MPI or GCI interface**
- **Microprocessor interface**
- **GCI interface option**
- **Programmability**
  - Two-wire AC impedance
  - Input/Output mode selection for one relay driver and five general purpose digital I/O pins.
  - Adapts to all ringing frequencies
  - Disconnect, line polarity and line-in-use thresholds
  - DTMF tone generators
  - Dial pulse and DTMF cadence
- **Special feature support**
  - DTMF tones
  - Dial pulses
  - Caller ID pass-through
  - Numeric address signaling
  - On hook transmission
- **Integrated 150 mW 3-V or 5-V Relay Driver**
  - Supports lifeline POTS in DSL IAD applications

### ORDERING INFORMATION

Device	Package
Le88010BQC	44-pin QFN (Green package)*

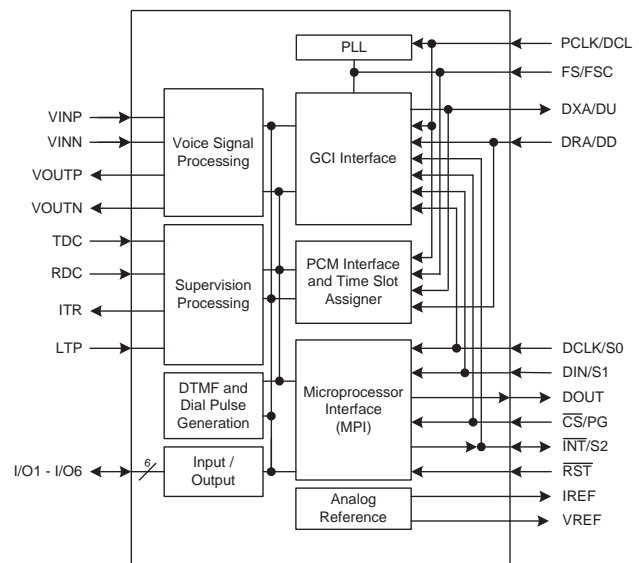
\*Green package meets RoHS Directive 2002/95/EC of the European Council to minimize the environmental impact of electrical equipment.

### DESCRIPTION

The Zarlink Le88010 VoicePort™ SLAC™ device, in combination with an analog DAA, implements all the voice functions necessary to properly terminate and monitor the customer premises side of a PSTN line and provide linear or G.711 A- or u-Law encoded voice output over a standard PCM or GCI highway. The Le88010 device is ideal for use in voice enabled DSL modems that implement lifeline POTS and support PBX functionality.

This device reduces system level cost, space, and power by achieving a high level of voice integration and adds programmability of transmission and signalling features. Designers benefit by having a simple, cost effective, low power and dense, interface design without sacrificing features or functionality.

### LE88010 VOICEPORT™ SLAC™ DEVICE BLOCK DIAGRAM



FEATURES	BENEFITS
• Seamless and compatible interface with solid state or transformer DAA	• Provides complete design flexibility to choose optimal DAA solution for target market
• Highly programmable	• Enables designer complete control over transmission and signalling features
• Highest level of integration	• Reduces system level cost and board space
• Comprehensive line monitoring	• Enables supervision functions such as disconnect, ringing signal detection, line-in-use, line polarity detection, and parallel phone off hook
• Dial pulse generation with cadence and DTMF tones	• Reduces real-time software overhead
• Small footprint, 44-pin QFN	• Reduces board space requirement with small form factor 7x7 mm square QFN package

### Related Literature and Supporting Collateral

- **081201-Le88010 VoicePort™ SLAC™ Device Data Sheet\***
- **Le71HR0823 - VE880 Series Line Module supporting 1FXS and 1FXO  
Up to 150-V ringing with a 12-V Flyback Tracking Power Supply**
- **Le71HK002 - Universal VoicePath™ Development / Demo Platform**
- **Le71SK002 - VoicePath™ API-II Software System**

*\*Contact your Zarlink Sales Representative to obtain the data sheet.*

### Packaging and Availability

See *Ordering Information* on first page.

### For More Information

To find the Zarlink Sales Office nearest you, visit our website at: [www.zarlink.com](http://www.zarlink.com).



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